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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,824	10/01/2003	Yoshihiro Nakata	P68040USI	8769
136	7590	06/15/2006	EXAMINER	
JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004			SERGENT, RABON A	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/674,824

Applicant(s)

NAKATA ET AL.

Examiner

Rabon Sergeant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on March 8, 2006 and March 31, 2006 have been entered.

2. Claims 1, 5, and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' components a) and b) are not mutually exclusive; therefore, it cannot be clearly determined if the claim is satisfied by a single component that satisfies the requirements of both components a) and b). The hexamethylene diisocyanate - trimethylolpropane derivative (component (b)) meets the isocyanate group terminated prepolymer of component (a).

Specifically, with respect to the hexamethylene diisocyanate - trimethylolpropane derivative, the trimethylolpropane is met by the polyol containing C-C bonds and the NCO/OH ratio for such a derivative is 2:1.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-263962 or Araki et al. ('300), each in view of Seiter ('722), Emmerling et al. ('623), and Samurkas et al. ('303).

The primary references disclose moisture curable one component polyurethane adhesives comprising a urethane prepolymer, wherein hexamethylene diisocyanate is disclosed as being a suitable reactant for its production, a silane coupling agent, applicants' claimed morpholino catalysts, and a dibutyltin dicarboxylate catalyst that satisfies applicants' claimed tin catalyst. See pages 1-6, especially paragraphs 0027 and 0042 of the machine translation of JP 11-263962. See abstract; columns 5-8; column 13, lines 33-38; and column 14, lines 36-39, within Araki et al.

5. However, the references are silent regarding applicants' claimed polyisocyanate derived silane coupling agent, the use of hexamethylene diisocyanate derivatives, corresponding to applicants' component b), and the silane coupling agent of claim 5. Still, the position is taken that these components in the claimed amounts were known components for moisture curable polyurethane compositions, suitable for such applications as the production of glass adhesives and sealants, at the time of invention. See column 2 within Seiter. See column 2 and examples within Emmerling et al. See column 6, lines 24-56, especially lines 31, 32, and 41-43, within

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Samurkas et al. Therefore, since it has been held that it is *prima facie* obvious to utilize a known component for its known function, the position is taken that it would have been obvious to incorporate these known moisture curable adhesive components within the compositions of the primary references. *In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPQ 244. The position is taken that applicants' filing date is October 1, 2003 for compositions employing tin catalysts other than dibutyltin diacetylacetonate and compositions employing the claimed polyisocyanate derived silane coupling agents.

6. The examiner has considered applicants' response; however, the prior art rejection has been maintained for the following reasons. Firstly, despite applicants' remarks, the position is maintained that adequate motivation has been provided to combine the teachings of the primary and secondary references. The position is maintained that it is *prima facie* obvious to utilize a known compound for its known function. Like the primary references, the secondary references are drawn to moisture curable polyurethane compositions; therefore, the compositions of the primary and secondary references are analogous. Furthermore, the compositions of the secondary references are disclosed as being adhesives and sealants for such substrates as glass; therefore, one seeking to improve the adhesion of polyurethane to such substrates would have been motivated to employ the adhesion promoters of the secondary references within the composition of the primary references. Secondly, despite applicants' argument, applicants' prepolymer is disclosed by the primary references; however, contrary to applicants' argument, the claims are not limited to any quantity of prepolymer. Thirdly, despite applicants' argument, applicants' component b) and the quantity of component (b), to the extent claimed, is disclosed by Samurkas et al. at column 6, lines 32 and 41-43. In summation, despite applicants'

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arguments, the position is maintained that the examiner has set forth a proper *prima facie* case of obviousness, and the position is further taken that applicants have neither established why it would not have been obvious to combine the teachings of the references as set forth nor adequately rebutted the *prima facie* case of obviousness by such means as a showing of unexpected results.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent  
June 11, 2006

  
**RABON SERGENT**  
**PRIMARY EXAMINER**